

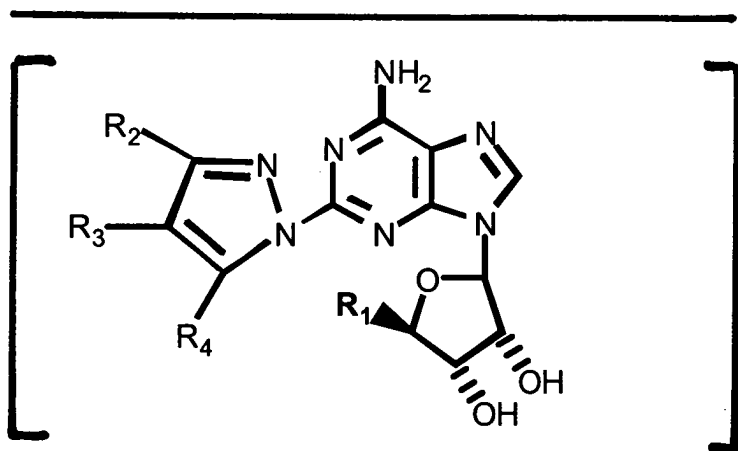
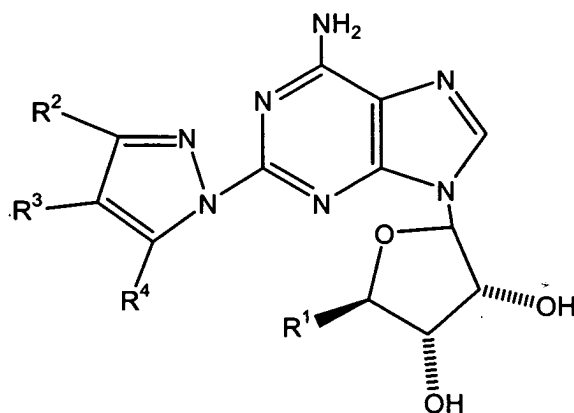
APPENDIX A

MARKED UP SPECIFICATION PARAGRAPHS AND CLAIMS PURSUANT
TO 37 CFR 1.121 TO ACCOMPANY THE RESPONSE
TO THE MARCH 13, 2001 OFFICAL ACTION

IN THE SPECIFICATION

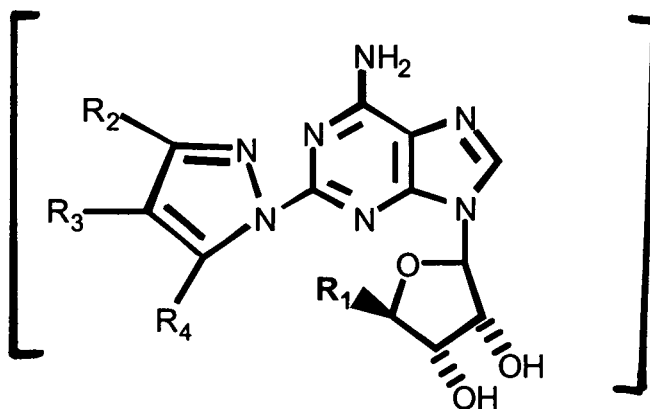
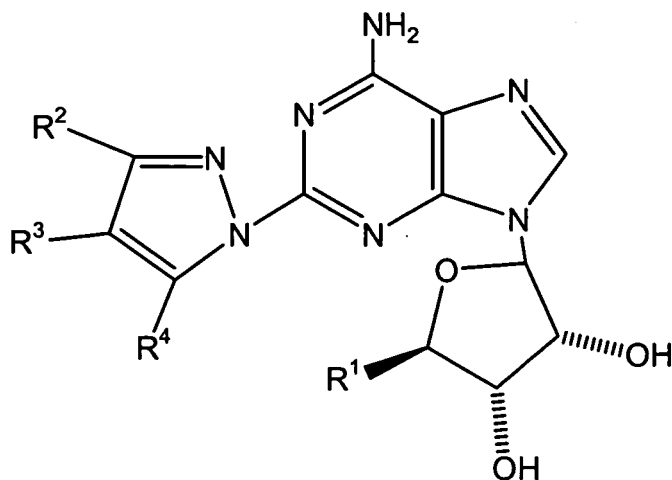
The paragraph at page 4, lines 7-10:

In one embodiment, this invention includes 2-adenosine N-pyrazole compositions having the following formula:



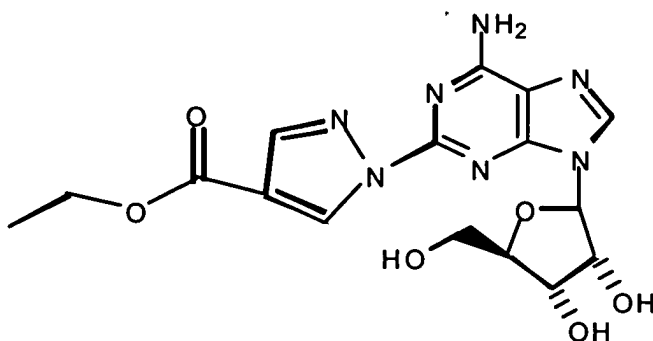
The paragraph at page 5, lines 2-4:

This invention includes a new class of 2-adenosine N-pyrazoles having the formula:



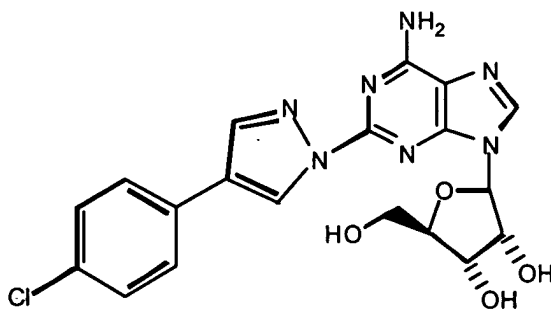
Cancel pages 24-28 from the application and replace with new pages 24-28 which are set forth

Below:

Example 1

Ethyl 1-{9-[(4S,2R,3R,5R)-3,4-dihydroxy-5-(hydroxymethyl)oxolan-2-yl]-6-aminopurin-2-yl}pyrazole-4-carboxylate which can also be identified as N⁶-{3-(3R)tetrahydrofuran-2-yl}-2-(N-1-(4-ethoxycarbonyl)pyrazolyl)adenosine(12).

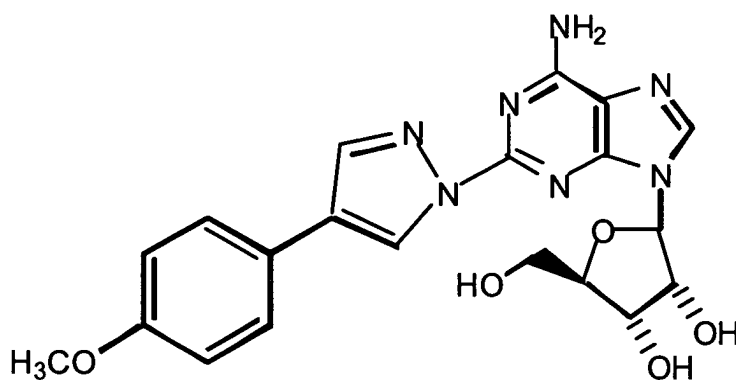
To a suspension of 2-hydrazinoadenosine (0.025 g, 0.08 mmol) in a 1:1 mixture of MeOH/AcOH was added (ethoxycarbonyl)malondialdehyde (0.019 g, 0.12 mmol) and the mixture was heated [heated] at 80°C for 3 h. The precipitate formed was collected by filtration and washed with EtOH and ether to afford 12. ¹HNMR (DMSO-d₆) δ 1.25 (t, 3 H), 3.5 (m, 1 H), 3.6 (m, 1 H), 3.8 (d, 1 H), 4.15 (d, 1 H), 4.55 (m, 1H), 5.0 (t, 1 H), 5.2 (d, 1 H), 5.5 (d, 1 H), 5.9 (d, 1H), 7.15-7.3 (m, 5 H), 7.8 (br s, 2 H), 8.1 (s, 1H), 8.4 (s, 1 H), 8.9 (s, 1H).

Example 2

(4S,2R,3R,5R)-2-{6-amino-2-[4-(4-chlorophenyl)pyrazolyl]purin-9-yl}-5-(hydroxymethyl)oxolane-3,4-diol which can also be identified as N⁶-{3-(3R)tetrahydrofuran-2-yl}-2-(N-1-(4-(4-chlorophenyl))pyrazolyl)adenosine (13).

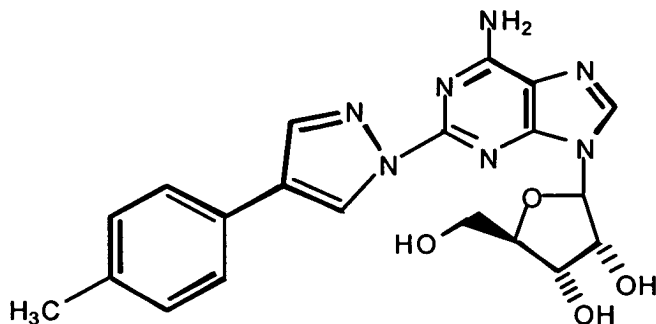
To a suspension of 2-hydrazinoadenosine (0.025 g, 0.08 mmol) in a 1:1 mixture of MeOH/AcOH was added 2-(4-chloro)malondialdehyde (0.022g, 0.12 mmol) and the mixture was heated at 80 °C for 3 h. The precipitate formed was collected by filtration and washed with EtOH and Ether to afford 13. ¹HNMR (DMSO-d₆) δ3.5 (m, 1 H), 3.6 (m, 1 H), 3.8 (d, 1 H), 4.15 (d, 1 H), 4.2 (q, 2 H), 4.55 (m, 1H), 5.9 (d, 1H), 7.45 (d, 2 H), 7.75 (d, 2 H), 8.25 (s, 1H), 8.35 (s, 1 H), 8.9 (s, 1H).

Example 3



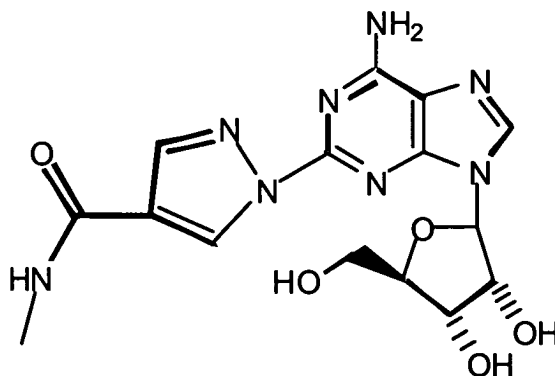
(4S,2R,3R,5R)-2-{6-amino-2-[4-(4-methoxyphenyl)pyrazolyl]purin-9-yl}-5-(hydroxymethyl)oxolane-3,4-diol which can also be identified as N⁶-{3-(3R)tetrahydrofuranyl}-2-(N-1-(4-(4-methoxyphenyl))pyrazolyl)adenosine (14).

To a suspension of 2-hydrazinoadenosine (0.025 g, 0.08 mmol) in a 1:1 mixture of MeOH/AcOH was added 2-(4-methoxy)malondialdehyde (0.022g, 0.12 mmol) and the mixture was heated at 80 °C for 3 h. The precipitate formed was collected by filtration and washed with EtOH and Ether to afford 14. ¹HNMR (DMSO-d₆) δ3.55 (m, 1 H), 3.65 (m, 1 H), 3.75 (s, 3 H), 3.9 (d, 1 H), 4.15 (d, 1 H), 4.6 (m, 1 H), 5.9 (d, 1 H), 6.75 (d, 2 H), 7.6 (d, 2 H), 8.15 (s, 1H), 8.35 (s, 1 H), 8.8 (s, 1 H).

Example 4

(4S,2R,3R,5R)-2-{6-amino-2-[4-(4-methylphenyl)pyrazolyl]purin-9-yl}-5-(hydroxymethyl)oxolane-3,4-diol which can also be identified as N⁶-{3-(3R)tetrahydrofuranyl}-2-(N-1-(4-(4-methylphenyl))pyrazolyl)adenosine (15).

To a suspension of 2-hydrazinoadenosine (0.025 g, 0.08 mmol) in a 1:1 mixture of MeOH/AcOH was added 2-(4-methyl)malondialdehyde (0.019g, 0.12 mmol) and the mixture was heated at 80 °C for 3 h. The precipitate formed was collected by filtration and washed with EtOH and Ether to afford 15. ¹HNMR (DMSO-d₆) δ3.55 (m, 1 H), 3.65 (m, 1 H), 3.75 (s, 3 H), 3.9 (d, 1 H), 4.15 (d, 1 H), 4.6 (m, 1 H), 5.9 (d, 1 H), 6.75 (d, 2 H), 7.6 (d, 2 H), 8.15 (s, 1 H), 8.35 (s, 1 H), 8.8 (s, 1 H).

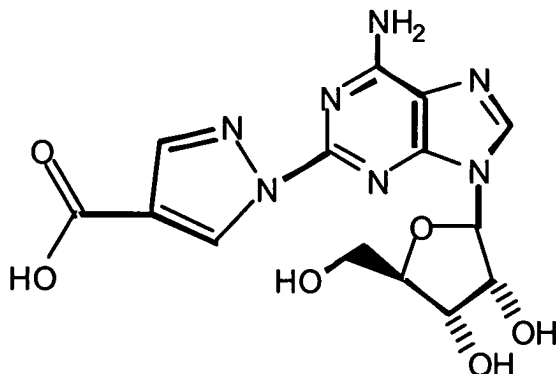
Example 5

(1-{9-[(4S,2R,3R,5R)-3,4-dihydroxy-5-(hydroxymethyl)oxolan-2-yl]-6-aminopurin-2-yl}pyrazol-4-yl)-N-methylcarboxamide which can also be identified as N⁶-{3-

(3R)tetrahydrofuranyl}-2-(N-1-(4-methylaminocarbonyl)pyrazolyl)adenosine (16).

Compound 12 (0.05 mg, 0.12 mmol) was added to 4 mL methylamine (40% sol. In water). The mixture heated at 65 °C in for 24 h. After concentration in vacuo, the residue was purified using prep. TLC (10% MeOH:DCM). ¹HNMR (CD₃OD) δ2.90 (s, 3 H), 3.78 (m, 1 H), 3.91 (m, 1 H), 4.13 (d, 1 H), 4.34 (d, 1 H), 4.64 (m, 1 H), 6.06 (d, 1 H), 8.11 (s, 1 H), 8.38 (s, 1 H), 9.05 (s, 1 H).

Example 6



1-{9-[(4S,2R,3R,5R)-3,4-dihydroxy-5-(hydroxymethyl)oxolan-2-yl]-6-aminopurin-2-yl}pyrazole-4-carboxylic acid which can also be identified as N⁶-{3-(3R)tetrahydrofuranyl}-2-(N-1-(4-carboxy)pyrazolyl)adenosine (17).

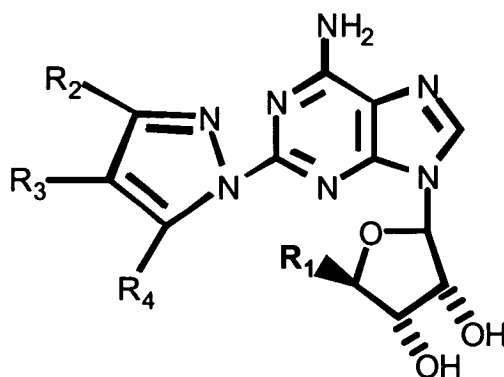
Compound 12 (0.05 mg, 0.12 mmol) was dissolved one equivalent of 1N NaOH. The solution was allowed to stir at Rt for 2h, then acidified to pH 4. The resulting precipitate was filtered and washed with water and ether. ¹HNMR (CD₃OD) Δ3.75 (m, 1 H), 3.90 (m, 1 H), 4.13 (d, 1 H), 4.43 (d, 1 H), 4.64 (m, 1H), 6.05 (d, 1H), 8.10 (s, 1H), 8.35 (s, 1 H), 9.05 (s, 1 H).

Example 7

Compositions of this invention were assayed to determine their affinity for the A2A receptor in a pig striatum membrane prep. Briefly, 0.2 mg of pig striatal membranes were treated with adenosine deaminase (2 U/ mL) and 50 mM Tris buffer (pH = 7.4) followed by mixing. To the pig membranes was added 2 μ L of serially diluted DMSO stock solution of the compounds of this invention at concentrations ranging from 10 nM to 100 microM or the control received 2 microL of DMSO alone, then the troated antagonist ZM 241385 in Tris buffer (50 mM, pH of 7.4) was added to achieve a final concentration of 2 nM . After incubation at 23 ° C for 2h, then the solutions were filtered using a membrane harvester using multiple washing of the membranes (3 x). The filter disks were counted in scintillation cocktail to determine the amount of displacement of tritiated ZM displaced by the compositions of this invention. Greater than a 5 point curve was used to generate K_i 's. and the number of experiments is indicated in the column marked in Table 1 below.

IN THE CLAIMS:

1. (Once amended) A [composition of matter] compound having the formula:



wherein $R^1 = -CH_2OH$, or $-CONR_5R_6$;

R^3 is selected from the group consisting of C_{1-15} alkyl, halo, NO_2 , CF_3 , CN , OR^{20} , SR^{20} , $N(R^{20})_2$, $S(O)R^{22}$, SO_2R^{22} , $SO_2N(R^{20})_2$, $SO_2NR^{20}COR^{22}$, $SO_2NR^{20}CO_2R^{22}$, $SO_2NR^{20}CON(R^{20})_2$, $N(R^{20})_2$, $NR^{20}COR^{22}$, $NR^{20}CO_2R^{22}$, $NR^{20}CON(R^{20})_2$, $NR^{20}C(NR^{20})NHR^{23}$, COR^{20} , CO_2R^{20} , $CON(R^{20})_2$, $CONR^{20}SO_2R^{22}$, $NR^{20}SO_2R^{22}$, $SO_2NR^{20}CO_2R^{22}$, $CONR^{20}SO_2R^{22}$, $OC(O)R^{20}$, $C(O)OCH_2OC(O)R^{20}$, and $OCON(R^{20})_2$, $-CONR^7R^8$, C_{2-15} alkenyl, C_{2-15} alkynyl, heterocyclyl, aryl, and heteroaryl, wherein the alkyl, alkenyl, alkynyl, aryl, heterocyclyl and heteroaryl substituents are optionally substituted with from 1 to 3 substituents independently selected from the group consisting of halo, alkyl, NO_2 , heterocyclyl, aryl, heteroaryl, CF_3 , CN , OR^{20} , SR^{20} , $N(R^{20})_2$, $S(O)R^{22}$, SO_2R^{22} , $SO_2N(R^{20})_2$, $SO_2NR^{20}COR^{22}$, $SO_2NR^{20}CO_2R^{22}$, $SO_2NR^{20}CON(R^{20})_2$, $N(R^{20})_2$, $NR^{20}COR^{22}$, $NR^{20}CO_2R^{22}$, $NR^{20}CON(R^{20})_2$, $NR^{20}C(NR^{20})NHR^{23}$, COR^{20} , CO_2R^{20} , $CON(R^{20})_2$, $CONR^{20}SO_2R^{22}$, $NR^{20}SO_2R^{22}$, $SO_2NR^{20}CO_2R^{22}$, $CONR^{20}SO_2R^{22}$, $OC(O)R^{20}$, $C(O)OCH_2OC(O)R^{20}$, and $OCON(R^{20})_2$ and wherein the optional heteroaryl, aryl, and heterocyclyl substituent is optionally substituted with one or more substituents selected from the group consisting of halo, NO_2 , alkyl, CF_3 , amino, monoalkylamino, [- or]di[-]alkylamino, alkylaminocarbonyl, [or] arylaminocarbonyl, [or] heteroarylaminocarbonyl [amide], $NCOR^{22}$, $NR^{20}SO_2R^{22}$, COR^{20} , CO_2R^{20} , $CON(R^{20})_2$, $NR^{20}CON(R^{20})_2$, $OC(O)R^{20}$, $OC(O)N(R^{20})_2$, SR^{20} , $S(O)R^{22}$, SO_2R^{22} , $SO_2N(R^{20})_2$, CN , and OR^{20} ;

R^5 and R^6 are each individually selected from the group consisting of H, and C_1-C_{15} alkyl optionally substituted with from 1 to 2 substituents independently selected from the group consisting of halo, NO_2 , heterocyclyl, aryl, heteroaryl, CF_3 , CN , OR^{20} , SR^{20} , $N(R^{20})_2$, $S(O)R^{22}$, SO_2R^{22} , $SO_2N(R^{20})_2$, $SO_2NR^{20}COR^{22}$, $SO_2NR^{20}CO_2R^{22}$, $SO_2NR^{20}CON(R^{20})_2$, $N(R^{20})_2$, $NR^{20}COR^{22}$, $NR^{20}CO_2R^{22}$, $NR^{20}CON(R^{20})_2$, $NR^{20}C(NR^{20})NHR^{23}$, COR^{20} , CO_2R^{20} , $CON(R^{20})_2$, $CONR^{20}SO_2R^{22}$, $NR^{20}SO_2R^{22}$, $SO_2NR^{20}CO_2R^{22}$, $CONR^{20}SO_2R^{22}$, $OC(O)R^{20}$, $C(O)OCH_2OC(O)R^{20}$, and

$\text{OCON}(\text{R}^{20})_2$ and wherein the optional heteroaryl, aryl, and heterocyclyl substituent are [is] optionally substituted with one or more substituents selected from the group consisting of halo, NO_2 , alkyl, CF_3 , amino, monoalkylamino, [- or]di[-]alkylamino, lkylaminocarbonyl, [or] arylaminocarbonyl, [or] heteroarylaminocarbonyl [amide], NCOR^{22} , $\text{NR}^{20}\text{SO}_2\text{R}^{22}$, COR^{20} , CO_2R^{20} , $\text{CON}(\text{R}^{20})_2$, $\text{NR}^{20}\text{CON}(\text{R}^{20})_2$, $\text{OC}(\text{O})\text{R}^{20}$, $\text{OC}(\text{O})\text{N}(\text{R}^{20})_2$, SR^{20} , $\text{S}(\text{O})\text{R}^{22}$, SO_2R^{22} , $\text{SO}_2\text{N}(\text{R}^{20})_2$, CN, and OR^{20} ;

R^7 is selected from the group consisting of hydrogen, C_{1-15} alkyl, C_{2-15} alkenyl, C_{2-15} alkynyl, heterocyclyl, aryl and heteroaryl, wherein the alkyl, alkenyl, alkynyl, aryl, heterocyclyl and heteroaryl substituents are optionally substituted with from 1 to 3 substituents independently selected from the group consisting of halo, NO_2 , heterocyclyl, aryl, heteroaryl, CF_3 , CN, OR^{20} , SR^{20} , $\text{N}(\text{R}^{20})_2$, $\text{S}(\text{O})\text{R}^{22}$, SO_2R^{22} , $\text{SO}_2\text{N}(\text{R}^{20})_2$, $\text{SO}_2\text{NR}^{20}\text{COR}^{22}$, $\text{SO}_2\text{NR}^{20}\text{CO}_2\text{R}^{22}$, $\text{SO}_2\text{NR}^{20}\text{CON}(\text{R}^{20})_2$, $\text{N}(\text{R}^{20})_2$, $\text{NR}^{20}\text{COR}^{22}$, $\text{NR}^{20}\text{CO}_2\text{R}^{22}$, $\text{NR}^{20}\text{CON}(\text{R}^{20})_2$, $\text{NR}^{20}\text{C}(\text{NR}^{20})\text{NHR}^{23}$, COR^{20} , CO_2R^{20} , $\text{CON}(\text{R}^{20})_2$, $\text{CONR}^{20}\text{SO}_2\text{R}^{22}$, $\text{NR}^{20}\text{SO}_2\text{R}^{22}$, $\text{SO}_2\text{NR}^{20}\text{CO}_2\text{R}^{22}$, $\text{OCONR}^{20}\text{SO}_2\text{R}^{22}$, $\text{OC}(\text{O})\text{R}^{20}$, $\text{C}(\text{O})\text{OCH}_2\text{OC}(\text{O})\text{R}^{20}$ and $\text{OCON}(\text{R}^{20})_2$ and wherein the optional heteroaryl, aryl and heterocyclyl substituent [is] are optionally substituted with one or more substituents selected from the group consisting of halo, NO_2 , alkyl, CF_3 , amino, monoalkylamino, [- or]di[-]alkylamino, lkylaminocarbonyl, [or] arylaminocarbonyl, [or] heteroarylaminocarbonyl [amide], NCOR^{22} , $\text{NR}^{20}\text{SO}_2\text{R}^{22}$, COR^{20} , CO_2R^{20} , $\text{CON}(\text{R}^{20})_2$, $\text{NR}^{20}\text{CON}(\text{R}^{20})_2$, $\text{OC}(\text{O})\text{R}^{20}$, $\text{OC}(\text{O})\text{N}(\text{R}^{20})_2$, SR^{20} , $\text{S}(\text{O})\text{R}^{22}$, SO_2R^{22} , $\text{SO}_2\text{N}(\text{R}^{20})_2$, CN, and OR^{20} ;

R^8 is selected from the group consisting of hydrogen, C_{1-15} alkyl, C_{2-15} alkenyl, C_{2-15} alkynyl, heterocyclyl, aryl, and heteroaryl, wherein the alkyl, alkenyl, alkynyl, aryl, heterocyclyl, and heteroaryl substituents are optionally substituted with from 1 to 3 substituents independently selected from the group consisting of halo, NO_2 , heterocyclyl, aryl, heteroaryl, CF_3 , CN, OR^{20} ,

SR^{20} , $N(R^{20})_2$, $S(O)R^{22}$, SO_2R^{22} , $SO_2N(R^{20})_2$, $SO_2NR^{20}COR^{22}$, $SO_2NR^{20}CO_2R^{22}$,
 $SO_2NR^{20}CON(R^{20})_2$, $N(R^{20})_2NR^{20}COR^{22}$, $NR^{20}CO_2R^{22}$, $NR^{20}CON(R^{20})_2$, $NR^{20}C(NR^{20})NHR^{23}$,
 COR^{20} , CO_2R^{20} , $CON(R^{20})_2$, $CONR^{20}SO_2R^{22}$, $NR^{20}SO_2R^{22}$, $SO_2NR^{20}CO_2R^{22}$, $OCONR^{20}SO_2R^{22}$,
 $OC(O)R^{20}$, $C(O)OCH_2OC(O)R^{20}$, and $OCON(R^{20})_2$ and wherein each optional heteroaryl, aryl,
 and heterocyclyl substituent is optionally substituted with one or more substituents selected from
the group consisting of halo, NO_2 , alkyl, CF_3 , amino, monoalkylamino, [- or] di[-]alkylamino,
 lkylaminocarbonyl, [or] arylaminocarbonyl, [or] heteroarylaminocarbonyl [amide], $NCOR^{22}$,
 $NR^{20}SO_2R^{22}$, COR^{20} , CO_2R^{20} , $CON(R^{20})_2$, $NR^{20}CON(R^{20})_2$, $OC(O)R^{20}$, $OC(O)N(R^{20})_2$, SR^{20} ,
 $S(O)R^{22}$, SO_2R^{22} , $SO_2N(R^{20})_2$, CN, and OR^{20} ;

R^{20} is selected from the group consisting of H, C_{1-15} alkyl, C_{2-15} alkenyl, C_{2-15} alkynyl,
 heterocyclyl, aryl, and heteroaryl, wherein the alkyl, alkenyl, alkynyl, heterocyclyl, aryl, and
 heteroaryl substituents are optionally substituted with from 1 to 3 substituents independently
 selected from the group consisting of halo, alkyl, monoalkylamino, [- or] dialkylamino,
 lkylaminocarbonyl, [or] arylaminocarbonyl, [or] heteroarylaminocarbonyl [amide], CN, O- C_{1-6}
 alkyl, CF_3 , aryl, and heteroaryl;

R^{22} is selected from the group consisting of C_{1-15} alkyl, [C_{2-15}] C_{2-15} alkenyl, C_{2-15} alkynyl,
 heterocyclyl, aryl, and heteroaryl, wherein the alkyl, alkenyl, alkynyl, heterocyclyl, aryl, and
 heteroaryl substituents are optionally substituted with from 1 to 3 substituents independently
 selected from the group consisting of halo, alkyl, monoalkylamino, [- or] dialkylamino,
 lkylaminocarbonyl, [or] arylaminocarbonyl, [or] heteroarylaminocarbonyl [amide], CN, O- C_{1-6}
 alkyl, CF_3 , aryl, and heteroaryl; and

wherein R^2 and R^4 are selected from the group consisting of H, C_{1-6} alkyl, and aryl that is
 optionally substituted with halo, CN, CF_3 , OR^{20} and $N(R^{20})_2$, with the proviso that when R^2 is not

hydrogen then R^4 is hydrogen, and when R^4 is not hydrogen then R^2 is hydrogen.

2. (Once Amended) The [composition]compound of claim 1 wherein R^3 is selected from the group consisting of C_{1-15} alkyl, halo, CF_3 , CN, OR^{20} , SR^{20} , $S(O)R^{22}$, SO_2R^{22} , $SO_2N(R^{20})_2$, COR^{20} , CO_2R^{20} , $-CONR^7R^8$, aryl and heteroaryl wherein the alkyl, aryl and heteroaryl substituents are optionally substituted with from 1 to 3 substituents independently selected from the group consisting of halo, aryl, heteroaryl, CF_3 , CN, OR^{20} , SR^{20} , $S(O)R^{22}$, SO_2R^{22} , $SO_2N(R^{20})_2$, COR^{20} , CO_2R^{20} and $CON(R^{20})_2$, and wherein each optional heteroaryl and aryl substituent is optionally substituted with one or more substituents selected from the group consisting of halo, alkyl, CF_3 , CN, and OR^{20} ;

R^5 and R^6 are each individually selected from the group consisting of H, and C_1-C_{15} alkyl optionally substituted with one aryl substituent that is optionally substituted with one or more substituents selected from the group consisting of halo [or] and CF_3 ;

R^7 is selected from the group consisting of C_{1-15} alkyl, C_{2-15} alkynyl, aryl, and heteroaryl, wherein the alkyl, alkynyl, aryl, and heteroaryl substituents are optionally substituted with from 1 to 3 substituents independently selected from the group consisting of halo, aryl, heteroaryl, CF_3 , CN, and OR^{20} , and wherein each optional heteroaryl and aryl substituent is optionally substituted with one or more substituents selected from the group consisting of halo, alkyl, CF_3 , CN, and OR^{20} ;

R^8 is selected from the group consisting of hydrogen and C_{1-15} alkyl;

R^{20} is selected from the group consisting of H, C_{1-4} alkyl and aryl, wherein the alkyl and aryl substituents are optionally substituted with one alkyl substituent; and

R^{22} is selected from the group consisting of C_{1-4} alkyl and aryl, wherein the alkyl and aryl substituents are optionally substituted with from 1 to 3 alkyl groups.

3. (Once Amended) The [composition]compound of claim 1 wherein R^3 is selected from the group consisting of C_{1-15} alkyl, halo, CF_3 , CN, OR^{20} , CO_2R^{20} , $-CONR^7R^8$, aryl and heteroaryl, wherein the alkyl, aryl and heteroaryl substituents are optionally substituted with from 1 to 3 substituents independently selected from the group consisting of halo, alkyl, aryl, CF_3 , CN, OR^{20} , CO_2R^{20} [or] and $CON(R^{20})_2$, and wherein each optional heteroaryl and aryl substituent is optionally substituted with one or more substituents selected from the group consisting of halo, alkyl, CF_3 , CN, and OR^{20} ;

R^5 and R^6 are each individually selected from the group consisting of hydrogen and C_{1-6} alkyl;

R^7 is selected from the group consisting of C_{1-10} alkyl, aryl, and heteroaryl, wherein the alkyl, aryl and heteroaryl substituents are optionally substituted with from 1 to 2 substituents independently selected from the group consisting of halo, aryl, heteroaryl, CF_3 , CN, and OR^{20} , and wherein each optional heteroaryl and aryl substituent is optionally substituted with at least one substituent selected from the group consisting of halo, alkyl, CF_3 , CN, and OR^{20} ;

R^8 is selected from the group consisting of hydrogen and C_{1-15} alkyl; and

R^{20} is selected from the group consisting of hydrogen and C_{1-4} alkyl.

4. (Once Amended) The [composition]compound of claim 1 wherein R^3 is selected from the group consisting of C_{1-10} , alkyl, halo, CF_3 , CN, CO_2R^{20} , $-CONR^7R^8$, aryl and heteroaryl wherein the alkyl, aryl and heteroaryl substituents are optionally substituted with from 1 to 3 substituents independently selected from the group consisting of halo, alkyl, CF_3 , CN, OR^{20} and $CON(R^{20})_2$;

R^5 and R^6 are each individually selected from the group consisting of hydrogen and C_{1-6} alkyl;

R^7 is selected from the group consisting of C_{1-10} alkyl, aryl, and heteroaryl, wherein the alkyl, aryl and heteroaryl substituents are optionally substituted with from 1 to 2 substituents independently selected from the group consisting of halo, aryl, heteroaryl, CF_3 , CN, OR^{20} and wherein each optional heteroaryl and aryl substituent is optionally substituted with at least one substituent selected from the group consisting of halo, alkyl, CF_3 , CN, and OR^{20} ;

R^8 is selected from the group consisting of hydrogen and C_{1-15} alkyl; and

R^{20} is selected from the group consisting of hydrogen and C_{1-4} alkyl.

5. (Once amended) The [composition]compound of claim 1 wherein R^3 is selected from the group consisting of C_{1-10} alkyl, halo, CF_3 , CN, OR^{20} , CO_2R^{20} , $-CONR^7R^8$ and aryl[;] wherein the alkyl and aryl substituents are optionally substituted with from 1 to 3 substituents independently selected from the group consisting of halo, alkyl, CF_3 , CN, OR^{20} and $CON(R^{20})_2$;

R^5 and R^6 are each individually selected from the group consisting of hydrogen and C_{1-6} ;

R^7 is selected from the group consisting of C_{1-10} alkyl, aryl, and heteroaryl, where the alkyl, aryl and heteroaryl substituents are optionally substituted with from 1 to 2 substituents independently selected from the group consisting of halo, aryl, heteroaryl, CF_3 , CN, and OR^{20} and wherein each optional heteroaryl and aryl substituent is optionally substituted with at least one substituent selected from the group consisting of halo, alkyl, CF_3 , CN, and OR^{20} ;

R^8 is selected from the group consisting of hydrogen and C_{1-15} alkyl; and

R^{20} is selected from the group consisting of hydrogen and C_{1-4} alkyl.

6. (Once amended) The [composition]compound of claim 1 wherein R^1 [=] is $-CH_2OH$;

R^3 is selected from the group consisting of CO_2R^{20} , $-CONR^7R^8$ and aryl; wherein the aryl substituent is optionally substituted with from 1 to 3 substituents independently selected from the group consisting of halo, C_{1-6} alkyl, CF_3 , CN, OR^{20} , and $CON(R^{20})_2$;

R⁷ is selected from the group consisting of hydrogen, C₁₋₁₀ alkyl and aryl, wherein the alkyl and aryl substituents are optionally substituted with from 1 to 2 substituents independently selected from the group consisting of halo, aryl, CF₃, CN, and OR²⁰ and wherein each optional aryl substituent is optionally substituted with at least one substituent selected from the group consisting of halo, alkyl, CF₃, CN, and OR²⁰;

R⁸ is selected from the group consisting of hydrogen and C₁₋₁₅ alkyl; and

R²⁰ is selected from the group consisting of hydrogen and C₁₋₄ alkyl.

7. (Once amended) The [composition]compound of claim 1 wherein R¹ [=] is -CH₂OH;

R³ is selected from the group consisting of CO₂R²⁰, -CONR⁷R⁸ and aryl wherein the aryl substituent is optionally substituted with from 1 to 2 substituents independently selected from the group consisting of halo, C₁₋₆ alkyl, CF₃ and OR²⁰;

R⁷ is selected from the group consisting of hydrogen, C₁₋₈ alkyl and aryl, wherein the alkyl and aryl substituents are optionally substituted with one substituent selected from the group consisting of halo, aryl, CF₃, CN, and OR²⁰ and wherein each optional aryl substituent is optionally substituted with at least one substituent selected from the group consisting of halo, alkyl, CF₃, CN, [or] and OR²⁰;

R⁸ is selected from the group consisting of hydrogen and C₁₋₈ alkyl; and

R²⁰ is selected from the group consisting of hydrogen and C₁₋₄ alkyl.

8. (Once amended) The [composition]compound of claim 1 wherein R¹ [=] is -CH₂OH;

R³ is selected from the group consisting of CO₂R²⁰, -CONR⁷R⁸, and aryl that is optionally substituted with from 1 to 2 substituents independently selected from the group consisting of halo, C₁₋₃ alkyl, CF₃ and OR²⁰;

R⁷ is selected from the group consisting of hydrogen, and C₁₋₈ alkyl that is optionally substituted with one substituent selected from the group consisting of halo, CF₃, CN and OR²⁰;

R⁸ is selected from the group consisting of hydrogen and C₁₋₃ alkyl; and

R²⁰ is selected from the group consisting of hydrogen and C₁₋₄ alkyl.

9. (Once amended) The [composition]compound of claim 1 wherein R¹ [=] is -CH₂OH;

R³ is selected from the group consisting of CO₂R²⁰, -CONR⁷R⁸, and aryl that is optionally substituted with one substituent selected from the group consisting of halo, C₁₋₃ alkyl, and OR²⁰;

R⁷ is selected from the group consisting of hydrogen, and C₁₋₃ alkyl that is optionally substituted with one substituent selected from the group consisting of halo, CF₃, CN and OR²⁰;

R⁸ is hydrogen; and

R²⁰ is selected from the group consisting of hydrogen and C₁₋₄ alkyl.

10. (Once amended) The [composition]compound of claim 1 wherein R¹ [=] is -CH₂OH;

R³ is selected from the group consisting of CO₂R²⁰, -CONR⁷R⁸, and aryl that is optionally substituted with one substituent selected from the group consisting of halo, C₁₋₃ alkyl and OR²⁰;

R⁷ is selected from the group consisting of hydrogen, and C₁₋₃ alkyl;

R⁸ is hydrogen; and

R²⁰ is selected from the group consisting of hydrogen and C₁₋₄ alkyl.

11. (Once amended) The [composition]compound of claim 10 wherein R⁷ is a methyl.

12. (Once amended) The [composition]compound of claim 10 wherein [R₃] R³ is -CO₂Et.

13. (Once amended) The [composition]compound of claim 1 wherein R¹ [=] is -CONHEt;

R³ is selected from the group consisting of CO₂R²⁰, -CONR⁷R⁸, and aryl[;] that is

optionally substituted with from 1 to 3 substituents independently selected from the group consisting of halo, C₁₋₆ alkyl, CF₃, CN, OR²⁰, and CON(R²⁰)₂;

R⁷ is selected from the group consisting of hydrogen, C₁₋₁₀ alkyl and aryl, wherein the alkyl and aryl substituents are optionally substituted with from 1 to 2 substituents independently selected from the group consisting of halo, aryl, CF₃, CN, and OR²⁰ and wherein each optional aryl substituent is optionally substituted with at least one substituent selected from the group consisting of halo, alkyl, CF₃, CN, and OR²⁰;

R⁸ is selected from the group consisting of hydrogen, and C₁₋₁₅ alkyl; and

R²⁰ is selected from the group consisting of hydrogen, and C₁₋₄ alkyl.

14. (Once amended) The [composition]compound of claim 1 wherein R¹ [=] is - CONHET;

R³ is selected from the group consisting of CO₂R²⁰, -CONR⁷R⁸, and aryl that is optionally substituted with from 1 to 2 substituents independently selected from the group consisting of halo, C₁₋₆ alkyl, CF₃ and OR²⁰;

R⁷ is selected from the group consisting of hydrogen, C₁₋₈ alkyl, and aryl, wherein the alkyl and aryl substituents are optionally substituted with one substituent selected from the group consisting of halo, aryl, CF₃, CN, and OR²⁰ and wherein each optional aryl substituent is optionally substituted with one or more substituents selected from the group consisting of halo, alkyl, CF₃, CN, and OR²⁰;

R⁸ is selected from the group consisting of hydrogen, and C₁₋₈ alkyl; and

R²⁰ is selected from the group consisting of hydrogen, and C₁₋₄ alkyl.

15. (Once amended) The [composition]compound of claim 1 wherein R¹ [=] is - CONHET;

R^3 is selected from the group consisting of CO_2R^{20} , $-CONR^7R^8$, and aryl that is optionally substituted with from 1 to 2 substituents independently selected from the group consisting of halo, C_{1-3} alkyl, CF_3 and OR^{20} ;

R^7 is selected from the group consisting of hydrogen, and C_{1-8} alkyl that is optionally substituted with one substituent selected from the group consisting of halo, CF_3 , CN and OR^{20} ;

R^8 is selected from the group consisting of hydrogen, and C_{1-3} alkyl; and

R^{20} is selected from the group consisting of hydrogen, and C_{1-4} alkyl.

16. (Once amended) The [composition]compound of claim 1 wherein R^1 [=]is - CONHET;

R^3 is selected from the group consisting of CO_2R^{20} , $-CONR^7R^8$, and aryl that is optionally substituted with one substituent selected from the group consisting of halo, C_{1-3} alkyl and OR^{20} ;

R^7 is selected from the group consisting of hydrogen and C_{1-3} alkyl that is optionally substituted with one substituent selected from halo, CF_3 , CN and OR^{20} ;

R^8 is hydrogen; and

R^{20} is selected from the group consisting of hydrogen, and C_{1-4} alkyl.

17. (Once amended) The [composition]compound of claim 1 wherein R^1 [=]is - CONHET;

R^3 is selected from the group consisting of CO_2R^{20} , $-CONR^7R^8$, and aryl that is optionally substituted with one substituent selected from the group consisting of halo, C_{1-3} alkyl and OR^{20} ;

R^7 is selected from the group consisting of hydrogen, and C_{1-3} alkyl;

R^8 is hydrogen; and

R²⁰ is selected from the group consisting of hydrogen, and C₁₋₄ alkyl.

18. (Once amended) The [composition]compound of claim 10 where R¹ is –CONH₂.

20. (Once amended) A method for stimulating coronary vasodil[at]ation in a mammal by administering to the mammal a therapeutically effective amount of a compound of claim 1 that is sufficient to stress the heart and induce a coronary steal situation for the purposes of imaging the heart.

23. (Once amended) A pharmaceutical composition [of matter] comprising the composition of claim 1 and one or more pharmaceutical excipients;

24. (Once amended) The pharmaceutical composition [of matter] of claim 23 wherein the pharmaceutical composition is in the form of a solution.